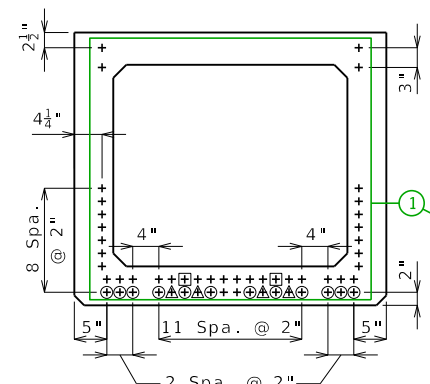


(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.

(2) $1\frac{1}{2}$ " (Typ.) ($\frac{3}{4}$ " Optional)



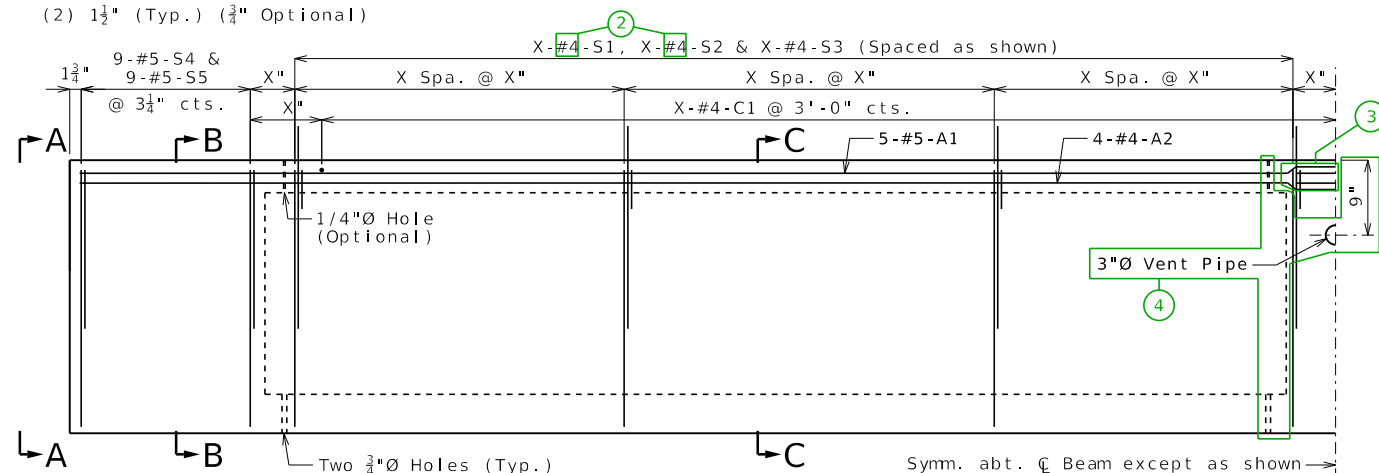
All strands are fully bonded unless otherwise noted.

+ Indicates prestressing strand.

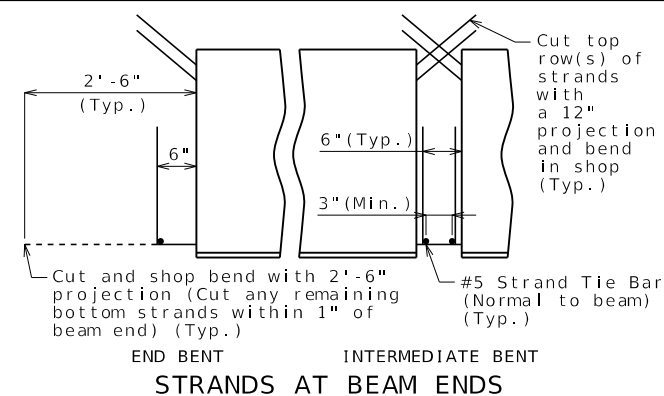
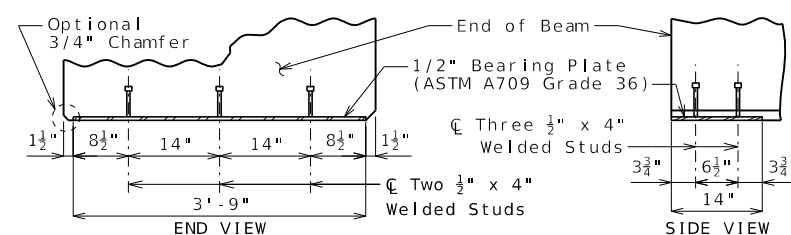
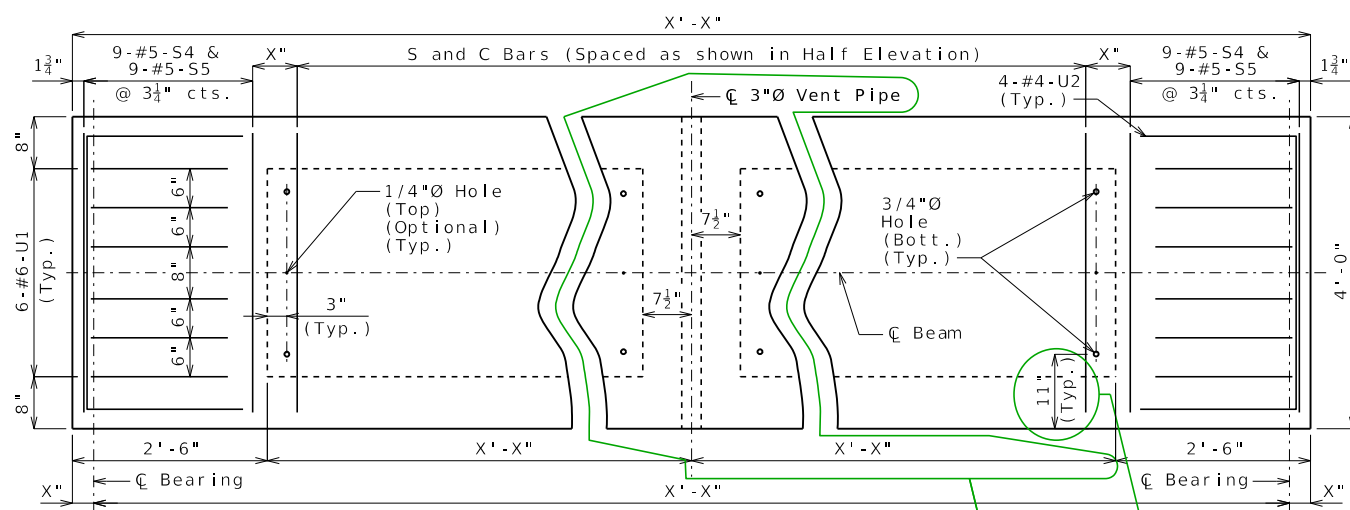
○ Indicates cut and shop bend
with 2'-6" projection.

☐ Indicates debonded from end of beam.

Δ Indicates debonded from end of beam.



Strands not shown for clarity.



BILL OF REINFORCING STEEL - EACH BEAM				
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE	BENDING DIAGRAM
10	5 A1	X' - X"	20	<p>(S1, S4) (S5)</p>
8	4 A2	X' - X"	20	
X	4 C1	3' - 7"	20	<p>(U1) (U2)</p>
X	4 S1	9' - 11"	10S	
X	4 S2	7' - 10"	51S	SHAPE 10S
X	4 S3	4' - 6"	50S	SHAPE 20
18	5 S4	9' - 10"	10S	<p>SHAPE 50S</p>
18	5 S5	7' - 4"	10S	
12	6 U1	6' - 4"	10S	<p>SHAPE 51S</p>
8	4 U2	7' - 4"	10S	

All dimensions are out to out. Use symmetry for dimensions not shown.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be one inch, unless otherwise shown.

All reinforcement shall be ASTM A615 or A706 Grade 60.

All S2 bars shall be epoxy coated.

General Notes:

Concrete for prestressed beams shall be Class A-1 with $f'_c =$ psi and $f'_{ci} =$ psi.

Use _____ strands, "Ø Grade 270,
with an initial prestress force of _____
⑥ _____ kips.

Pretensioned members shall be in accordance with Sec 1029.

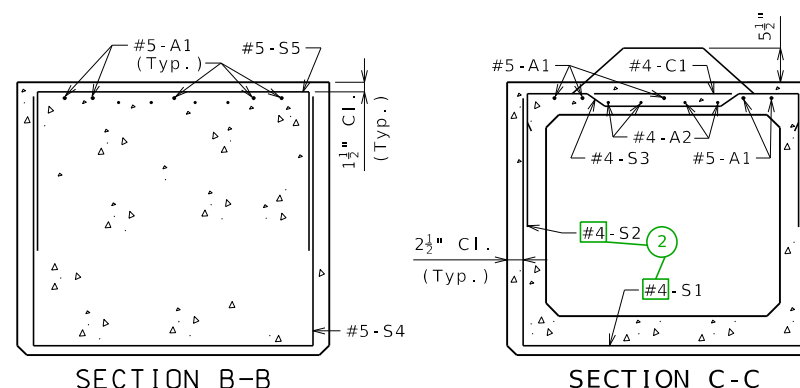
Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior beams are the same except: coil ties, application of bond breaker, coil inserts for slab drains.

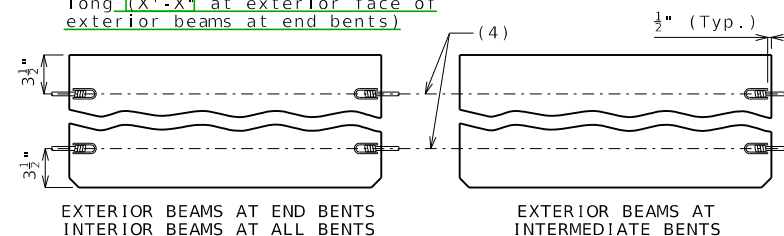
For Beam Camber Diagram, see Sheet
No. .

For location of coil inserts at slab drains, see Sheet No. .

For location of coil ties at
concrete bent diaphragms, see
Sheets No. and .



(4) ϕ 3/4"Ø (Min.) Coil Tie Rods 2'-6" Long (X'-X' at exterior face of exterior beams at end bents)

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions.

Sheet No. of

SPREAD BOX BEAMS - SPANS (X-X) AND (X-X)

DATE PREPARED	
12/2/2025	
ROUTE	STATE
	MO
DISTRICT	SHEET #
	11
COUNTY	
JOB NO.	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION

DATE _____

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STANDARD DRAWING GUIDANCE (do not show on plans):
(Turn off Level Bridge-Guidance to hide guidance)

- ①

Actual strand arrangement, bent up strands, and debonding (if any) is by design (top two strands are required). Add or remove symbols and instructions as required. Strands may be placed continuously across beam (eliminating 4" space), but dimension to drain hole in Part Plan shall be revised to 10".
- ②

Revise if #5 is required. Use 9'-10" for #5-S1 actual length and 7'-9" for #5-S2 actual length.
- ③

Splices shown only when necessary (girder length > 60'-2"). Use 19" lap for #4 & 2'-0" lap for #5.

When lap is unnecessary:

- Delete grouped elements.

- Extend A bars to $\text{\textcircled{C}}$ Beam.

- Revise 10 to 5 A1 bars & 8 to 4 A2 bars.
- ④

Interior diaphragm, void holes & vent pipe shall be shown only when necessary (when structure may be submerged).

When not necessary:

- Delete the two grouped elements.

- In Half Elev. extend hidden lines to $\text{\textcircled{C}}$ Beam.

- In Part Plan revise remaining dimension to full length of void.
- ⑤

Revise minimum dimension if required by design.
- ⑥

By design. Typically 30.98 kips per 0.5" strand & 43.94 kips per 0.6" strand, rounded to nearest whole kip.